In the Specification:

Page 3, lines 14-33, amend the paragraph at that location as follows:

The prior art method of characterizing alignment offsets for a particular job being run on a particular lithography system (hereinafter, "machine") involves running so-called "send ahead" wafers to measure the alignment offset for each machine and each job. With reference to FIG. 1A, the prior art method involves exposing a first pattern 10 with a center 10C, such as a fairly large box (e.g., 50 microns on a side), at a first location on the wafer. The wafer is then developed, and re-coated with photoresist and re-loaded into the machine. A second pattern 20 with a center 2C, similar or identical to that of pattern 10, is then printed on the wafer at a second location so that its center 20C is precisely displaced from center 10C by a predetermined distance (e.g., 200 microns). This displacement is accomplished by programming the machine to move either the wafer stage or reticle stage (or both) by the predetermined distance 30 (see FIG. 2. This "send ahead" wafer is then sent to an independent alignment measurement tool. The alignment measurement tool measures the precise location of centers 10C and 20C of patterns 10 and 20, respectively, relative to some reference point. From this information, the measurement tool deduces the actual displacement 30' between the respective centers. For a perfect machine, the measured displacement 30 would be identical to that of the programmed displacement 30'. However, with reference to FIG. 1B, in practice actual measured displacement 30 and programmed displacement 30' are different. This difference **[[Ä]]** **Δ** represents the "alignment offset" for that particular combination of machine and job.

Page 9, lines 17-27, amend the paragraph at that location as follows:

With reference to FIG. 7, step 62A of the synthetic model method involves combining shape primitives 120 to form more complex shapes to be used as alignment patterns. An example alignment pattern formed from combining shape primitives 120 is

pattern 130 of FIG. 8, which made **is** up of four shape primitives 120D, and which has a composite geometric center 132. Pattern 130 is formed within a box 134 (dashed line) which also have a geometric center 136 coinciding with geometric center 132. Shape primitives 120 can be overlapped, rotated, or have one or more of its dimensions increased or decreased. The centroid of the alignment pattern can be defined by the CAD program user. Also, the CAD program 110 preferably has the capability of generating and storing in database 100 additional user-defined shape primitives 120, if necessary.

Page 11, lines 26-31, amend the paragraph at that location as follows:

With reference now also to FIG. 10A, by way of example, a preferred metrology pattern arrangement 200 includes replicating a particular zero offset pattern 210 having a geometric center 212 (FIG. **[[9B]]** **10B**) at four corners of an imaginary square 214, as indicated by the dashed line. Metrology pattern 200 has geometric center 220. In a preferred embodiment, the second metrology pattern is simply the single zero offset pattern that makes up part of the first metrology pattern.